

EMPOWERING CITIZENS THROUGH PARTICIPATORY DESIGN: A CASE STUDY OF MSTÓW, POLAND

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Abstract

While Polish towns have begun to realize the role of public space and started several development and improvement projects, these activities were usually conducted in a top-down manner, where solutions were imposed on the local community without much understanding of its needs and expectations. Mstów, a village in Southern Poland with several amenities, currently seeking new development possibilities, has been chosen as a platform for a research project within the “Design in the Field” program organized by the Regional Government of Silesia Region aiming at promoting the participatory approach to forming a local strategy. Given the opportunity of conducting this workshop, the authors chose to apply the participatory design process, which aimed at engaging local inhabitants and leaders to conjointly define the development possibilities and opportunities for the village. The goal of this research was to identify local needs and opportunities, and propose a range of design interventions, which showed a promise to develop local potential to shape both usable and experiential space for residents and tourists.

Streszczenie

W ostatnich latach w wielu miejscowościach w Polsce realizuje się wiele projektów zagospodarowania i rewitalizacji przestrzeni publicznej. Działania te są jednak często prowadzone odgórnie, a rozwiązania narzucane lokalnej społeczności bez dogłębnego zrozumienia jej potrzeb i oczekiwań. Mstów, wieś w południowej Polsce wielu walorach turystycznych, poszukując sposobów zagospodarowania przestrzeni publicznej zgłosiła się i została wybrana do programu „Design w Terenie”, organizowanego przez Urząd Marszałkowski Województwa Śląskiego. Celem programu była promocja tworzenia lokalnych strategii zagospodarowania przestrzeni przy wykorzystaniu metod partycypacji społecznej. W ramach programu autorzy zostali zaproszeni do przeprowadzenia warsztatów, w których przy zaangażowaniu lokalnej społeczności i liderów powstała wizja rozwoju dla kluczowych przestrzeni publicznych w gminie. W ramach tego procesu przeprowadzono badania mające na celu zidentyfikowanie lokalnych potrzeb i szans oraz zaproponowanie szeregu interwencji projektowych, rozwijających lokalny potencjał tak, by tworzyć użyteczne i atrakcyjne przestrzenie dla mieszkańców i turystów.

Keywords: Participatory Design; Design Thinking; Design Charette; Rural development.

1. INTRODUCTION

Although there is a growing awareness regarding the importance of public participation in both urban and rural design and planning in Poland, the real-life cases meet several challenges. Public participation is required by planning legislation but in practice it

means – in the best case – debating about projects prepared by professionals at the final stages of decision-making when major changes are nearly impossible to make. This case study presents an approach, which aimed at redefining key spaces in a rural area in Southern Poland through participatory design techniques involving local citizens. The project addressed

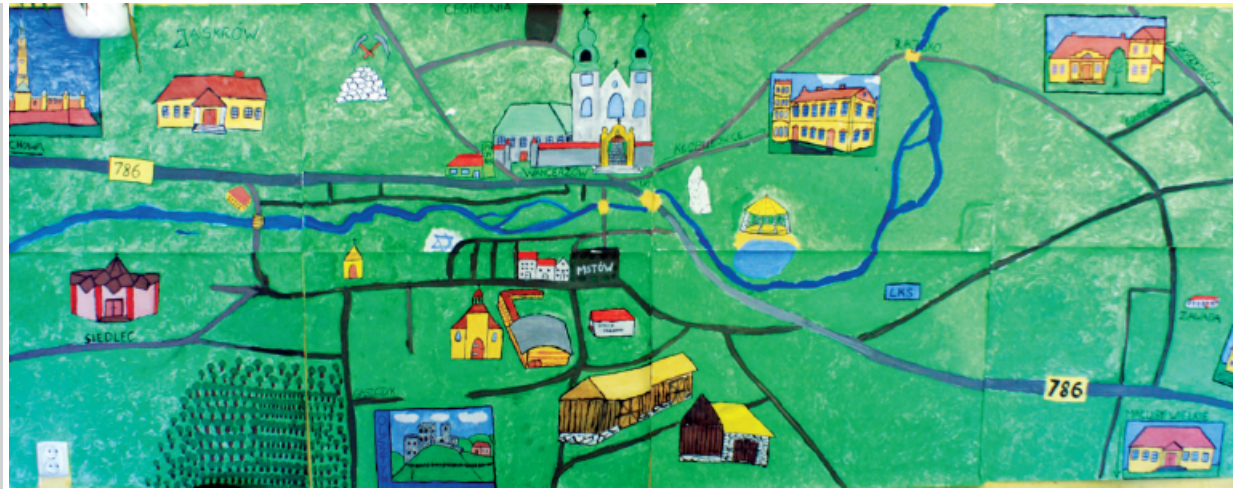


Figure 1.
A map of Mstów with its attractions: old barns, the church and the river with its leisure area, hand drawn by local Children

aspects such as: participatory urban design, User-Centered Design and interdisciplinary cooperation between design and architecture students. The combination of these elements made the process a unique experience, which might be used as a model for addressing urban space design in a participatory charette-style approach aimed at understanding local needs, defining relevant goals and suggesting design solutions.

Design Silesia

Design Silesia is a project run by the Regional Government of Silesia Region, funded by the European Social Fund (ESF) through Human Capital Operational Programme, sub-activity 8.2.2. Regional Innovation Strategy. “Design in the Field” („Design w terenie!”) was a design charette which aimed at generating ideas for improving the public space of one of Silesian towns. Mstów has been selected from twelve other boroughs in a competitive process, which aimed at identifying a place with both design potential and a real need for improvement. While other boroughs have already had their strategies defined and hoped for design support to help them to implement their visions, Mstów was a place with no development strategy and with a few disconnected investments, which could not be easily brought together into a consistent development plan. As such it has appeared to be a place where we would be able to apply a participatory design process rather than just developing specific design solutions.

Mstów

Mstów is a village with 2000 inhabitants located in Southern Poland, near the town of Częstochowa, in the so-called Polish Jurassic Highland. It is a relatively attractive location, with several amenities such as picturesque landscape, Warta river, historic market square, a monastery, etc. (see: Fig. 1 and 2).

In the last years the character of the village has been changing from agriculture to the touristic and residential base for Częstochowa. While there have recently been some investments in the public space, the details of the realization lacked functionality and were strongly criticized by its inhabitants. These investments included the change of the market square, where greenery and the facilities were replaced by an empty stone-brick flooring and a creation of a recreation area with a swimming pond, which has been realized ad hoc, concentrated on expensive yet not functional paths and at the same time lacking facilities such as electricity and sewage. Interestingly, the recreational area turned out to be a great success as a summer tourist magnet, which has surprised the authorities unprepared to accommodate a heavy traffic. Such a situation led to further frustration of the local citizens, particularly those living in the neighborhood of the recreational area, as the village got entirely jammed with the incoming traffic and tourists tended to park anywhere due to the lack of sufficient number of parking lots. In such a situation the local authorities decided to apply for the “Design in the Field” project hoping for suggestions regarding sustainable village development.



Figure 2.
Pictures of Mstów, seen from a local hill. (photo M. Stangel)

2. THEORETICAL FRAMEWORK

Placemaking

As previously mentioned, the majority of publically financed architecture and urban design in Poland is still led in the top-down design manner. However, there is a growing interest in alternative attitudes, which concentrate on the sense of place and a participatory design process.

Worldwide, the notion of participatory design dates back to the 60s and 70s, when several urbanists such as Jane Jacobs (1970), Christopher Alexander (1977), Gordon Cullen (1995) and others, begun to realize the reasons behind the failures of modernist urban planning and architectural design in creating successful and vibrant public spaces. Since the 80s, the New Urbanism movements advocated creating urban spaces with the qualities of traditional cities (dense urban grid, mixed use, public spaces with active frontages, etc.). While addressing an urban form, New Urbanism also praised the participatory design methods, namely a design charette, where a team of professionals would work in a limited time (and space), closely with representatives of the local community, to achieve an optimal design solution, which

addressed the key requirements of different stakeholders.

In Poland, while there is a growing awareness of the importance of public participation in urban design, and the issue has been a subject to professional debate, the real life cases face several challenges. Although public participation is formally required by planning legislation, practice usually means debating about ready made projects prepared by professionals with little space for any real influence. In several cases it is even further limited to the possibility of submitting motions at the early planning process, and comments and protests in the final stage.

While new design methods have usually been implemented in larger cities rather than towns and villages, the rural environment such as Mstów has several advantages including a small and close local community and local authorities, which are personally known by citizens. In a smaller community, it is relatively easier to attract the attention of a representative section of local inhabitants. The participatory process also allows marginalized voices to participate and express their opinions and expectations.

Participatory Design

The Participatory Design (PD) approach emerged in the 80s in Scandinavia out of the labor unions push for workers to have democratic control in their environment (Ehn, 1988; Greenbaum and Kyng, 1991; Schuler and Namioka, 1993). It is a design practice involving different non-designers: potential users, external stakeholders and team members who come from disciplines other than design such as marketing, engineering, sales, etc. in a variety of co-design activities throughout the entire design process (Sanders, Brandt and Binder, 2010). Carroll and Rosson (2007) state that:

“Participatory design integrates two radical propositions about design. The first is the moral proposition that the people whose activity and experiences will ultimately be affected most directly by a design outcome ought to have a substantive say in what that outcome is. The moral proposition is that users have a right to be directly included in the process of design. The second is the pragmatic proposition that the people who will need to adopt, and perhaps to adapt to an artefact or other outcome of design, should be included in the design process, so that they can more offer expert perspectives and preferences regarding the activity that the design will support, and most likely transform. The pragmatic proposition is that directly including the users’ input will increase

the chances of a successful design outcome”.

While the early work in PD mainly stemmed from research attempts to democratize the design of ICT systems, participatory design today spans across a broad range of fields (commercial, research as well as community oriented) applying a large variety of tools and techniques. The tradition of Scandinavian design put a strong emphasis on cooperation between designers and non-designers called by Ehn (1988): “a meeting of language games with prototyping of shared artefacts as a centerpiece of design dialogues”. Such dialogues can also incorporate collaborative explorations of daily practices, habits and routines (Binder and Brandt, 2008; Buur and Bødker, 2000). The most popular techniques include scenario techniques stemming from theatre, design games used as a platform for the design dialogue and prototyping that supports participants in a joint creation of concepts and mock-ups (Sanders et al., 2010).

Alternative PD approaches are concerned with enabling non-designers to articulate their ideas, so they could become a foundation for the subsequent design work (e.g., Müller, 2007; Sanders, 2008). Yet another approach promotes using infrastructures or toolkits supporting users and appropriating technology designed by others (e.g., Goodell, Kuhn, Maulsby and Traynor, 1999). Mattelmakki (2006) showed how probing techniques could prove productive in co-design projects due to the richness of their characteristics. Westerlund (2009) further shows how to combine probing and prototyping while Brereton and Buur (2008) apply tools created for a singular participatory workshop and embed them long term while exploring user context over time.

Research through Design

In our view, designing urban solutions requires an approach, in which the research does not always precede but rather becomes a part of the design activity. Therefore, we proposed to apply research through design approach (Frayling, 1993) as a means to formulate and test the solutions to stimulate local community of Mstów. The model proposed by Frayling defines ways, in which designers can engage with wicked problems and presents design artifacts as outcomes aiming to transform the world from its current to a preferred state (Rittel and Webber, 1973). The term: a wicked problem was coined in reaction to the inability of system architects to apply scientific methods to address social problems such as, for example, urban crime. A wicked problem was seen as a problem, which cannot

be properly modeled due to the conflicting perspectives of the involved stakeholders. The authors argued that many problems could never be appropriately modeled, which creates an opportunity for design research to provide complementary knowledge by applying methods unique to the design processes.

Design research grew out of the need to address the increasing complexity of solutions (such as battleships, airplanes, rockets but also ever more complex urban spaces) designers were asked to create (Bayazit, 2004). These challenges created a need for new design methods that were more predictable and collaborative. Such an approach seemed to advance, Schön’s (1983) idea of seeing design as a reflective practice where designers reflect back on their actions to improve design methodology. Design researchers describe their work as: “the study, research, and investigation of the artificial made by human beings, and the way these activities have been directed either in academic studies or manufacturing organizations” (Bayazit, 2004, p.16).

In this context, research through design approach aims at providing the designer with insights regarding the specific user-solution relationship (Desmet et al., 2001). It underlines the role of a prototype as an instrument of building design knowledge where the prototype serves as a means to define, develop and evaluate that knowledge (Keyson and Alonso, 2009). Observations of how the prototype is experienced guide an iterative design process.

Zimmerman, Forlizi and Evenson (2007) proposed a model, which represents ways in which designers engage with wicked problems by integrating the behavioral theories with the technical opportunities. Through ideation, iteration and critique of alternative concepts design researchers keep on reframing the problem as they attempt to make the right thing (Greenberg and Buxton, 2008). Such a process results in a problem definition, an articulation of the ideal state and a collection of artifacts-models or prototypes accompanied by documentation of the process itself. The model supports designers in identifying new opportunities or advancements of current solutions. By evaluating the performance of the artifact in the real world it helps to discover unanticipated effects and provide a platform for bridging context of use with the needs of various stakeholders. When facing a challenge to develop urban solutions that are complex in terms of function and context, research through design helps to provide a way to increase the validity of the proposed concepts (Zimmerman, Forlizi and Evenson, 2007).

3. METHODOLOGY

A chosen methodology was a combination of tools and techniques strategically chosen to serve a specific purpose. The PD tools are best applied through drawing upon three types of activities: making, telling and enacting. For example, telling activities such as diaries could be used for face-to-face enacting of scenarios from the present situation, while making activities, such as prototyping might be used to inspire the formulation of future scenarios (Sanders, Brandt and Binder, 2010).

Based on the aforementioned arguments we have designed a design process that consisted of the following steps:

observations,
interviews and questionnaires,
vision development through creative sessions,
iterative design process, concept evaluation.

The consecutive steps are described in detail in the following sections.

Participants

The design team was built out of ten master students, five out of which studied design and five of architecture. Students voluntarily applied to the program and have been chosen based on their portfolio and a letter of application. The team was led by two experts who combined professional and academic practice: a User Experience designer and an architect. The project was prepared together with local authorities, which were the providers of knowledge regarding the region and also enablers with respect to the contacts with the local community.

User studies

The project lasted seven days. The entire team has moved to Mstów for this period and run all activities from the local Culture Center.

In the first two days the aim of the team was to learn the specificities of the village during site visits, observations and meetings with local leaders and stakeholders. The representatives of the local authorities presented the most important places in village: the market, the remains of nineteenth century barns, and the recently developed recreation area on the Warta River with the so-called “Rock of Love”. The team visited one of the several orchards and learned about cultivation of apples. They also visited the major local employer – Demar factory (one of the largest Polish shoe manufacturers).

Furthermore, fifteen members of the local community (including the mayor, the headmaster of the primary school, the local journalist, the owners of local businesses and the citizens) participated in a series of invited lectures and discussions about the village, its potential and its problems (see: Fig. 3).



Figure 3.
The students discussing local problems and possibilities with the representatives of Mstów community. (photo M. Stangel)

Interviews

In order to truly get to know Mstów better, the most important stage was to talk to the citizens who knew best what their village was like and what it needed. The students carried out a total of 30 interviews with residents of various age and occupations, which provided a complex picture of the village. They learned about the problems, needs and opportunities for Mstów as seen with the eyes of its inhabitants. One of the most important aspects regarded the split between the local community who often descended from the area and the community treating Mstów as a suburb of Częstochowa, which led to stagnation of the entire community. Another important issue regarded unused possibilities in leveraging local agriculture. The students also asked about how the citizens would see short and long term development of their community. The main opportunity for Mstów was seen in terms of making the town a tourist attraction, which would subsequently lead to the increase in well-being and new job opportunities. These talks also helped to learn, which things the residents were proud of and which elements needed to be further developed. During the visits the students identified the following problems to be further considered:

lack of a bridge on the river which separates two sides of the village,
lack of sufficient roads and paths,
lack of tourist information and appropriate marks

leading to the leisure area, lack of attractions in the market square, small accommodation base, devastation of the old barns.

The interviews became the starting point for subsequent stages of design, which are described below.

Defining the design space

After the interviews, the residents were invited (by a poster announcement) to a creative session, whose purpose was to discuss and group the most important issues for Mstów using an affinity diagramming technique (see: Fig. 4).

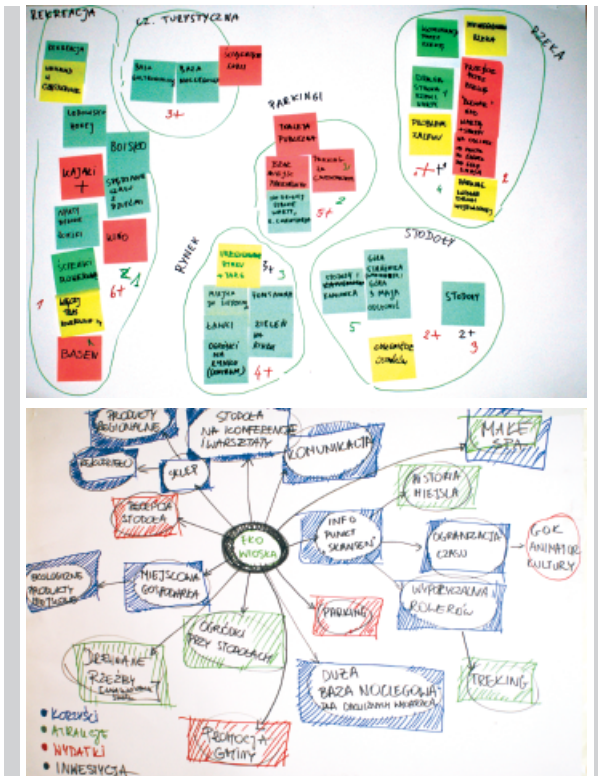


Figure 4.

Affinity diagrams defined during the created session where the students and the representatives of the local community discussed the potential areas of improvement for Mstów

The session led to defining the following needs for the local community:

- Providing infrastructure for activities related active leisure particularly to kayaking, bicycling and water recreation, as well as the ice rink, sleigh and skiing spots for the winter. A new playground and a swimming pool were desired, as well as a leisure

- space for children, which could be used throughout the year. A larger number of accommodation and catering facilities, as well as a tourist information centre would encourage visitors to stay longer;
- Providing tourist infrastructure, including parking lots, sidewalks, bicycle paths, public toilets, more bicycle racks and dust bins, as well as better lighting, especially surrounding the swimming area. Residents also asked for a police station in the village;
- Market square development, which could be made more attractive by increasing the amount of greenery, creating charming places to meet and organize the vending stalls;
- Developing the banks of river Warta, which should become an attraction rather than a threat. It was important to regulate its banks and to create at least two footbridges. Residents would also like a “boulevard along the Warta River” stretching from the bridge in Mstów to the springs under the hill. They further wanted to renew the tradition of wooden sculptures by the river, which until recently had been the landmark of the town, as well as to expose the Rock of Love in a better way;
- Conserving the area with the remains of the barns, which should be retained and made a tourist attraction, revealing the landscape and the island rocks. This area could be used for an open-air museum of objects related to the agriculture and animal breeding, where tourists could see and feel what life is and was in the countryside;
- Promotion of regional products, including apple juice and processed fruits from nearby orchards;
- Cultural development, including regular events and cultural attractions. Cultural center should be more open, and besides offering group activities to the inhabitants, it should also serve as a meeting place of relaxation and self-development;

Identifying the key problems and needs of the residents helped the team to define the most promising growth opportunities for Mstów:

- a charming place, where tradition meets modernity,
- a place of recreation, where one can relax the spirit and flesh,
- a unique place where you can taste the local cuisine with an apple theme.

In short, the local community wanted to live in a place, which they could be proud of and where they could find jobs for themselves and their families.

An iterative design process

The results of discussions and consultations with residents led to choosing three aspects of Mstów to be creatively developed. The team applied *research through design* approach (Frayling, 1993) as a means to formulate and test the solutions to stimulate local community of Mstów. In such a process, a designer starts with exploring complex issues in a realistic context and reflects them back on the prototype, which is then exposed to the users. Observations of how the prototype was experienced guide an iterative design process.

The students formed three independent teams, each working on one of the identified aspects. The first group aimed to propose a solution that would lead tourists to the most important tourist attractions, so that none of them would be missed. The second group saw the challenge in proposing a new life for the area of old barns. Members of the group wondered how to give the ruins new features to emphasize their uniqueness and make them become a prominent attraction in the region. The third group dealt with improving the market square and the Town Cultural Centre together with its inner courtyard.

Participants found an opportunity to develop these sites by linking various activities happening in and around them. The primary objective was to make these places more open and accessible to residents. The proposed projects formed a coherent vision rooted in the needs and expectations of residents. The concepts showed a range of possible ways to uncover and develop local potential and opportunities in order to form a new quality of unique places for residents and tourists.

First, each group proposed two design alternatives based on the following criteria: short versus long-term development, and low versus high budget required to realize the vision.

All concepts were visualized in a form of posters and discussed with local community (see: Fig. 5). Three concepts were selected for further development. Interestingly, the selected concepts were those requiring long-term investment. The citizens argued that, although they might need to wait longer to see the results of these projects, they consider them as more sustainable to the entire community comparing to quick and cheap fixes.



Figure 5. Verification of design alternatives with members of local community. (photo Radosław Kazmierczak)

4. RESULTS

The above-described process led to the definition of three concepts for Mstów: a tourist route around all local attractions, a redesign of a market square and the local cultural center and eco hotels built using the remains of the ancient barns.

Tourist route

The first project aimed at exposing the attractions that await tourists in Mstów. The trail consisted of six sites that relate to different spheres of life: culture, tranquility, folklore, reflection, sport, recreation and history. The proposed path seen on the map forms a letter “M” (see: Fig. 6). This shape (which may also resemble local elements such as rocks, or the barn walls) could be a starting point for visual identification for the municipality. In each of the six points of the route there are specially designed informational and recreational spaces with seating, containing information on places visited and the successive points of the route. These sites could become places of picnics, meetings, etc. In such a way, the team wanted to ensure that the visitors in Mstów could easily find their way around the village and to be provided with resting spots while exploring the neighborhood.

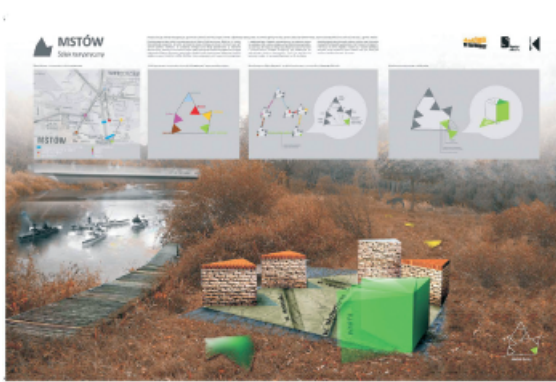


Figure 6.
The concept proposed by Joanna Jaroszyńska, Ewa Leśniak and Sebastian Dewerenda: the visualization of the six attractions of Mstów forming a letter M, which could become a visual identity for the municipality and also the visualization of the picnic place repeating the same shape in a form of a table, seats and the bicycle racks

These objectives were to be achieved through social mobilization. Residents were to be invited to jointly engage in a change of the public space by equipping it with their own, now redundant objects (e.g., furniture such as tables and chairs) as well as renovating and painting the walls of the inner yard for the purpose of a summer cinema. Such activities aimed to result in that space being treated more like their own, and thus to stimulate its opportunistic use by the residents. The team suggested that the inner courtyard of the Cultural Centre could be divided into three zones: a zone for fun with coffee tables, a zone for entertainment with the space for dancing and a zone for culture, where an open-space cinema could be created. As the cultural center opens up onto the Market Square some of the spring and summer activities, such as classes for children organized by the local social organization, could then be extended into that space by simply moving some of the furniture around.

Market Square and the local cultural centre

The second project concerned the revitalization of the Market Square and adaptation of the inner courtyard of the municipal cultural center (see: Fig. 7).

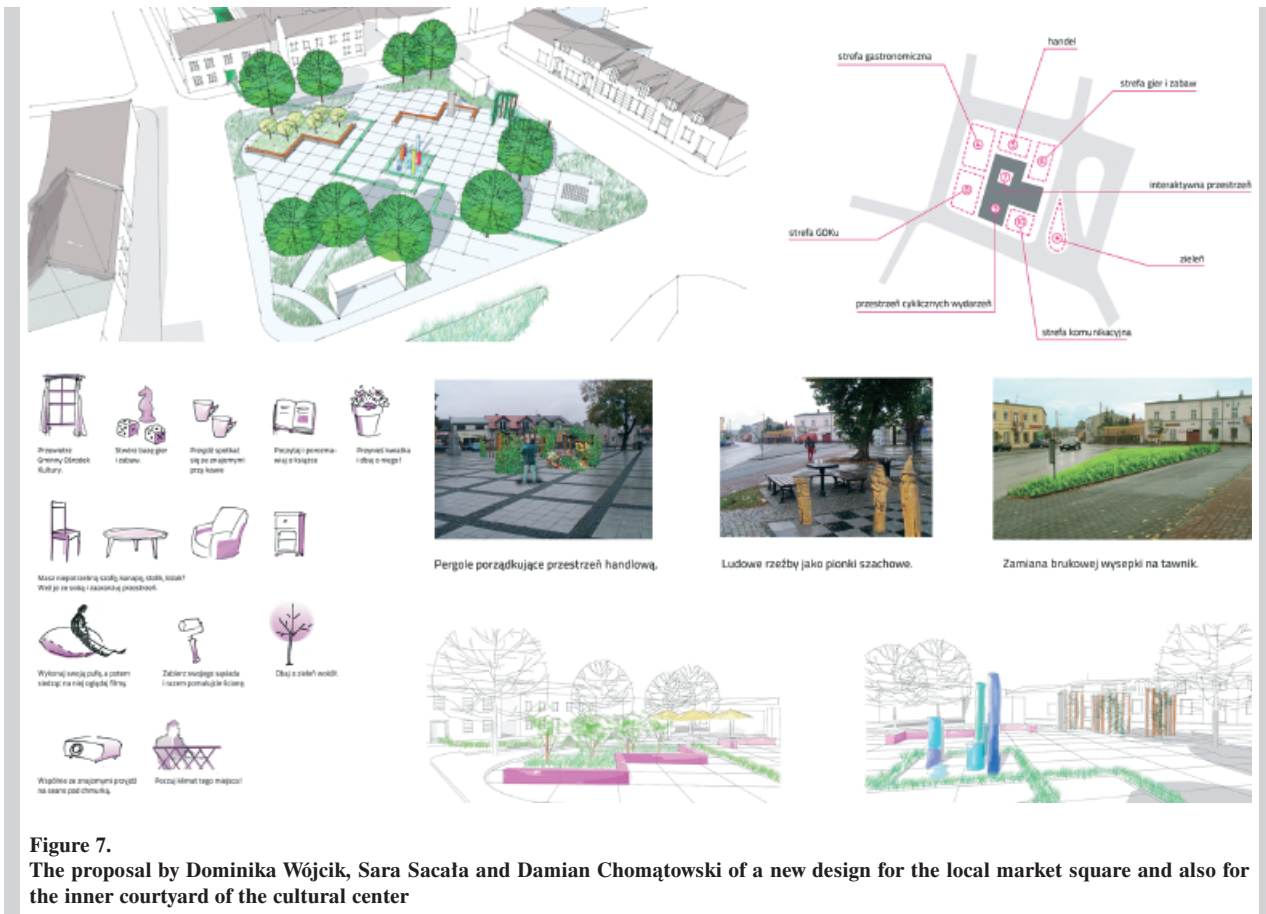


Figure 7.
The proposal by Dominika Wójcik, Sara Sacala and Damian Chomątowski of a new design for the local market square and also for the inner courtyard of the cultural center



Figure 8. Prototyping the proposed new facilities for the inner courtyard of the cultural center, by means of adhesive tape and chalk drawings. (photo M. Stangel)

Eco Hotels

The third project considered a meadow with the remains of old barns. There used to have been about 80 barns on a hill and their remains – limestone walls standing in the lush grass bring to mind southern European picturesque landscapes. The team proposed the creation of “eco-hotels”, which would combine ecological lifestyle accommodation allowing for relaxation and recreation as well as various other options for active recreation (see: Figure 8). The

hotels could be based on four scopes of activity: environmental, social, cultural and economic. The concept promoted ecological lifestyle, in line with current global trends. Local products, the calm beauty of the landscape and environmentally sound operation of eco-hotels aimed to constitute the main advantages of the proposed development. The project suggested a typology of construction related the barns’ remains, ranging from simple wooden platforms aligned to the barn walls, through temporary tensile constructions, to whole new buildings with wooden walls and glass openings.

Idea evaluation

All three concepts were presented to the entire local community during the last day of the project in the form of an open-air exhibition built on the Market Square (see: Fig. 9, 10, 11 and 12). The exhibition was accompanied with testing local products (see: Fig. 12) and final discussion with the teams, which had the final chance to discuss their ideas both with the residents and local authorities. Interestingly, the venue also created space for an open discussion between the authorities and the inhabitants regarding the future steps for the village.



Figure 9. The project by Sabina SujECKa, Marcin Lubecki, Ewelina Czajka and Katarzyna Pyka of eco-hotels built using the remains of the old barns



Figure 10.
Final exhibition on the Market Square of Mstów (photo M. Stangel)



Figure 11.
Local youth trying out the idea of a Hyde Park-like wall aimed for the inner yard of the Local Cultural Center (photo Radosław Kazmierczak)



Figure 12.
Local children trying out the concept for the resting spaces along the tourist route (photo M. Stangel)

5. DISCUSSION AND CONCLUSIONS

Many villages such as Mstów seek new opportunities for enhancing their competitiveness, enriching tourist experience and improving the quality of life of a local community. The participatory *research through design*

approach, which took place within the “Design in the field” programme resulted in a range of design proposals based on a deep analysis of the potential of the place and the needs of the local community. The versatile and interdisciplinary group composed of the students and professionals engaged in that process, which – despite the short time span (just one week) –



Figure 13.
The local choir serving apples and hot apple juice to the visitors of the exhibition (photo Radosław Kazmierczak)

included important elements, such as: an analysis, evaluation, prototyping, getting feedback and refining design solutions. The obtained results were highly valued by the local community and authorities. Other outcomes included the activation of the local community, stimulating interaction between various local stakeholders, inhabitants and authorities. One of the ideas pertaining to the promotion of the local products has been taken up by the local government and led to creation of an “Apple Day” – a local celebration day, during which the local orchards are promoted. We strongly believe that the proposed approach combining participatory methods from architecture and design could offer a new way of building sustainable and responsible strategies for places all over the world.

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